

[1963]

North Central Comfrey Producers

P. O. Box 195

Glidden, Wisconsin

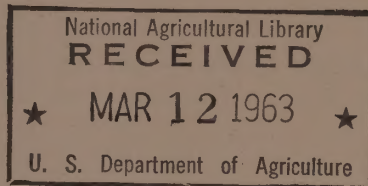


Plants and Cuttings

(Symphytum Peregrinum)

COMFREY is worth your consideration for:

1. Its very high food value for livestock.
2. Its very high yield per annum in tonnage.
3. Its medicinal properties.
4. It contains more protein than any other known forage crop.
5. It is the only crop known to contain the health preserver "allantoin."
6. It makes a good vegetable eaten as spinach or earthed up like asparagus.
7. Its roots go down 10 feet, tapping water during drouth and gathering nutrients.
8. It is an activator for compost with an exceptionally high potash content.
9. It makes the yolks of eggs a deeper yellow with a higher vitamin "A" content.
10. It is easily raised.
11. It has no known insect pests and one known disease.
12. It is eaten with relish by cattle, horses, goats, sheep, pigs, rabbits, guinea pigs, ducks, geese, turkeys, chickens, and other domesticated animals that require roughage and greens.



COMFREY is a Borage (Boraginaceae) plant which originated in the Caucasus Mountains in southern Russia.

COMFREY was first introduced in England in 1771, when an English gardener at the Palace of Catherine the Great of Russia sent some plants to England. Actually other species of comfrey were grown long before this, but they were not suitable for high forage production. A Medical Journal of 1568, reports:

"The rootes are good if they be broken and dronken for them that spitte bloode and are goode to glewe together fresh woundes."

In 1870, Comfrey was introduced to English farmers and small plot holders by "Henry Doubleday," a Quaker minister who was farming on a small scale. He grew it successfully and carried on the only experiments up to and including his life time. He obtained yields of 120 tons per acre by green weight from a hybrid, he discovered and propagated. This hybrid is what is now raised as the forage crop Comfrey (*Symphytum Peregrinum*). It was developed from Russian comfrey (*Symphytum Asperrium*), which was shipped from Russia to England in 1771, and English Comfrey (*Symphytum officinale*).

COMFREY grows a large tap root or roots to a depth of 8 to 10 feet, finding nourishment and water where most plants are helpless. Comfrey is very leafy and if allowed to blossom produces large clusters of blue blossoms that fade to pink. The foliage will stand 14 to 15 degrees of frost. Comfrey begins its growth early in the spring. It makes its first cutting in the spring before most early grasses have made enough growth to even consider pasture or harvest. Our comfrey has been subjected to 40 degrees below zero without any winter kill. Comfrey is a perennial. Once established comfrey will last and produce as many years as you desire to care for it. Comfrey must not be allowed to blossom if to be used for forage, because "if allowed to flower vigorous growth stops for that season". Comfrey makes a small yield the first year, a larger yield the second and comes into full production in the third season.

COMFREY has produced 100 tons per acre consistently in test plots in Africa and New Zealand. This tonnage is obtained from 8 to 12 cuttings per season depending upon the length of the growing season. Comfrey grows year around in mild and hot climates. Yields for temperate regions can be calculated at 8 tons per acre for each month of growing season starting in spring after temperatures no longer drop below 28 degrees and in the fall until temperatures drop to 20 degrees.

COMFREY should be planted in a sweet soil with a P. H. of 6.0 to 7.0. If the soil is sour add lime. Comfrey can be planted any time of the year that the soil can be worked. For the best results in planting; plant ROOT CUTTINGS from as early in the spring as the soil can be worked until 60 days before first frost is expected in the fall and after grass has gone dormant in the fall until the ground freezes; plant CROWN CUTTINGS from as early in the spring as the soil can be worked until 30 days before first frost in the fall; WHOLE PLANTS should not be planted in the heat of summer if it can be avoided. If you must plant in the heat of summer a mulch will be very beneficial. The optimum time for planting is during the cool moist spring weather. When planting in cool spring weather plant shallow, in the heat of summer plant deep. In the south and southwest avoid planting during the hot season if possible. We do not advise large plantings of comfrey in muck soils. However, comfrey can be raised successfully in muck by mixing half sand and half muck to fill a 18 by 18 by 18 inch hole for each plant. Prepare the soil as if you were going to plant corn or potatoes, plant 3 or 4 feet apart. Mark rows both ways and plant on the crosses. This makes it possible to cultivate both ways and eliminates most hand weeding. All grasses and weeds should be kept down the first year by frequent but shallow cultivation and an occasional hand hoeing. Cut for feed or compost when top growth reaches 12 inches. After the plants have become established, cultivation can be reduced to 3 or 4 times a year. Keep the grass down. Most weeds will be destroyed when harvesting the comfrey as they will be cut too often to produce seeds.

The cuttings are 2" to 5" long depending upon the diameter of the roots. The roots should be planted 2 to 8 inches deep with the cuttings laying flat. Whole plants should be planted in their natural position but 2 inches below the surface. The soil should be firmed around the root. If your cuttings are wilted upon arrival soak them in ordinary cold water for 4 to 8 hours and they will become firm and can then be planted. Plant as soon as possible after

you receive your roots or plants. They will grow even if not planted and this will greatly weaken the plant or root.

COMFREY should be cut for forage before the flower buds appear, as animals do not like the large stems that develop. The nutrient value falls rapidly once the flowers appear. Do not cut the plant closer than 2 inches above the ground. New growth will begin immediately and another crop will be ready to harvest in 10 to 30 days depending upon the weather and desired leaf size. Comfrey can be dried for hay, used for silage, or fed green. If used for silage mix 1/3 Comfrey and 2/3 grass, "not legumes." Corn, oats, millet, etc., can be substituted for grass. If more than 1/2 Comfrey is used the protein content is so high it soon becomes infested with maggots.

COMFREY is very valuable in the compost heap. The high nitrogen and potash content makes it a valuable activator. Unusual as it sounds "comfrey is a finished compost as soon as it is cut and plowed under." Cut the comfrey and bury it 3 to 5 inches deep and plant the crop immediately above the buried comfrey. Apply 1 pound per foot of row, more if enough is available. This one pound will increase the yield by 30% to as much as 100%. Later cuttings may be used as a mulch.

COMFREY will not and cannot cause bloat. The "allantoin" content is a preventive and curative for scours. It can be fed green or dry to the youngest baby animals. The following table is an analysis on a dry matter basis of comfrey compared to alfalfa.

	Protein %	Fibre %	Ash %	Oil %	Carbo- hydrates %	Beta- carotene parts per million	Total digestable nutrients %
Comfrey before bloom	21.8 to 33.4	13.8	14.7	2.0	36.9	116	86.5
Alfalfa early flower	12.2 to 18.6	23.9	10.9	2.3	36.1	—	78.9

It can be easily seen that comfrey is far superior to alfalfa if its yields are only equal to and do not exceed the yields of alfalfa. Comfrey produces 3 to 5 times the yield of alfalfa on a ton per acre basis.

Root cuttings are cut from the tap roots and larger lateral roots. They contain no eyes or buds when you receive them, but the eyes or buds will develop in 20 to 40 days after planting. 20 percent over run is included with each order of root cuttings as some will fail to develop a plant.

The crown cuttings all contain eyes or buds which begin growth at once and should have visible top growth in 2 to 8 days. Some crown cuttings will have small leaves when you receive them.

Small plants are started from commercial cuttings planted 3 to 4 inches apart to produce a small plant with only a few roots to make transplanting easier. Small plants are one year old.

One year old plants are started from small crowns or large root cuttings. They are planted at an 18-inch spacing to produce a large vigorous plant with a heavy root system. All plants have the small root ends trimmed for easier transplanting.

When you receive your roots, or cuttings, you may find small broken fragments of roots in the package. Do not throw these fragments away !!! Plant these fragments 1/2 to 1 inch deep in a flat wooden box about 3 inches deep and keep well watered and you will be pleasantly surprised to have a bonus of some very fine small plants. These can be transplanted when the tops are about 8 inches high. Remove the leaves before transplanting.

If you have a problem about comfrey, send us a self addressed stamped envelope and we will answer your questions to the best of our ability and knowledge. If your order of cuttings does not produce as many plants as you ordered, notify us and we will ship replacements for the amount you are short.

Pertinent Information

1. Comfrey makes its largest yield on a 3' x 3' spacing.
2. Comfrey requires an organic source of Nitrogen.
3. Never fertilize comfrey with a water soluble fertilizer salt. This will over feed and cause the plant to become sick.
4. Fertilize comfrey with raw ground rock. Use limestone for calcium, phosphate rock for phosphorus, and granite or green sand for potash and trace minerals.
5. As a service for those people who desire more information about Dr. Kirschner's Green Drink" mentioned on page 2 of the booklet comfrey, we can supply Dr. Kirschner's book, "Nature's Healing Grasses" at \$2.00 post paid. This book contains the recipe for the Green Drink and directions for several other uses of comfrey.
6. Comfrey can be dried by fan forced air.
7. A little ground feed sprinkled over comfrey will tempt hesitant animals to eat it.
8. A 3' x 3' spacing requires 4,880 plants per acre; 3½' x 3½' requires 3,800; 4' x 4' requires 2,700.
9. We store plants to fill orders received during winter months.
10. Orders of plants or crown cuttings amounting to \$10.00 or more will be shipped "Special Delivery."
11. Comfrey contains six vitamins plus several minerals.
12. When propagating your plants; best results will be obtained by using crowns and the smaller young roots which are brown skinned with a clear white interior.
13. Become a member of the "Henry Doubleday Research Assoc., 20 Convent Lane, Bocking, Braintree, Essex, England." Subscription rate is \$3.00 per year. An excellent investment.
14. Our cuttings are all taken from State Certified stock.
15. We will have named varieties of comfrey available after September 1, 1963. Write for descriptive literature and price list available after August 1, 1963.
16. If your order is a few days late it is due to wet weather in summer or unusually cold weather in winter.
17. Comfrey rarely sets seed and will not spread by roots unless spread by mechanical means or by hand so comfrey will not and cannot become a pest.
18. If a planting of comfrey is to be removed it can be done by one of three methods. Plow rather deep in early fall and drag with a field cultivator to bring the roots to the surface to freeze out during the winter. Or pasture pigs for one summer and fall. Or spray with 24-D poison spray.
19. Comfrey does very well if grown with a permanent mulch of hay, straw, wood chips, etc.
20. Never heat comfrey over 125 degrees as higher temperatures destroy the allantoin and vitamins.
21. Large plantings, using commercial cuttings, have been successfully planted with a tobacco planting machine.
22. We can supply "Narrative of an Investigation Concerning an Ancient Medicinal Remedy", at \$1.00 post paid.
23. Comfrey (*Symphytum Peregrinum*) is sold by many names in the U. S. and Canada, but all comfrey available in U. S. and Canada came originally from a planting owned by a Mrs. Greer in England with the exception of one named variety. All comfrey (*Symphytum Peregrinum*) is here in the U. S. due to the efforts of Lawrence D. Hills, honorable secretary of the Henry Doubleday Research Association.